



## **National Unit specification: general information**

**Unit title:** Reassessed Monitoring Excavation in the Road/  
Highway (111)

**Unit code:** F92T 04

**Superclass:** TK

**Publication date:** July 2010

**Source:** Scottish Qualifications Authority

**Version:** First

## **Credit points and level**

1 National Unit credit(s) at SCQF level 6: (1 SCQF credit points at SCQF level 6\*)

*\*SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

## **Guidance on Assessment of this Unit**

Assessment will be by a multiple choice question examination marked out of 10. Candidates must correctly answer at least 8 (80%) of the questions to achieve this unit.

The examination will sample the knowledge elements of this unit.

## **Unit 11 Monitoring excavation in the highway**

This unit covers the requirements that you must meet when monitoring excavation work in the highway. **You must ensure that you act in accordance with all current specifications and procedures and that you follow safe working practices at all times when carrying out the activities covered in this unit. The Code of Practice specified in this unit is *Specification for the Reinstatement of Openings in Highways*.**

The unit contains the following four elements, which you must cover:

- 11.1 Monitor excavation work in the highway
- 11.2 Monitor action taken to avoid damage to underground apparatus during excavation
- 11.3 Monitor selection, disposal and storage for re-use of excavated materials
- 11.4 Monitor site safety

In element 11.1, you will monitor excavation work being carried out in the highway. You will need to ensure that appropriate tools are selected for the operation, and that it is fit for purpose. You must ensure that the site is inspected to identify areas of high risk for excavation, and that caution is exercised during excavation in any high risk areas. You must also ensure that the excavation is carried out according to specifications, and that the working methods used minimise subsequent reinstatement. You will need to demonstrate that you know the remedial action to take when you identify any problems with the excavation work.

In element 11.2, you will monitor the action taken to avoid damage to underground apparatus during the excavation, ensuring that the apparatus is correctly located and marked, and that exposed utilities' apparatus is correctly identified. You must ensure that where a risk of damage to utilities' apparatus is identified, precautions are taken to minimise it, and that you know the appropriate remedial action to take should damage to utilities' apparatus occur. You will need to check that exposed apparatus is supported safely, that the requirement for safe trench sidewall support is identified.

In element 11.3, you will monitor the selection, storage and disposal of excavated materials. You will need to ensure that materials are correctly identified for re-use as backfill, and that they are safely and correctly stored on site. You must also ensure that materials for disposal are safely stored, and that the appropriate provisions are made for their removal from the site. You must demonstrate that, where you identify any problems with the procedures used for selecting, storing and disposing of materials, you take appropriate remedial action.

In element 11.4, you will monitor site safety throughout the excavation, ensuring that health and safety requirements are met in respect of site operations and site conditions. You will need to ensure that the appropriate equipment is available on site, in sound working condition, and that safe working practices are followed throughout the operation. You must show that you know what action must be taken to remedy any risks to site safety.

Please note: *You must use metric units of linear measurement when undertaking this unit.*

*Where the term **utilities' apparatus** is used within these qualifications, this includes the following:*

- *gas mains (plastic and metallic)*
- *water mains (plastic and metallic)*
- *sewers and drains*
- *electricity cables (low- and high-voltage)*
- *telecommunications and television cables*

# Unit 11 Monitoring excavation in the highway

## Element 11.1 Monitor excavation work in the highway

| Performance criteria   |   |
|--|---|
| <p>You must show that:</p> <ul style="list-style-type: none"> <li>a) you ensure that the type of footway, carriageway and pavement structure is correctly identified prior to excavation</li> <li>b) you ensure that the <b>equipment</b> selected to carry out and support the excavation is suitable to the operation and fit for purpose</li> <li>c) you ensure that the site is inspected to identify areas of high risk for excavation activities</li> <li>d) you check that appropriate caution is exercised when excavating in areas of high risk</li> <li>e) you ensure that materials are excavated at all construction levels according to specifications</li> <li>f) you monitor the working methods used for the excavation to ensure that they minimise subsequent reinstatement</li> <li>g) you check that <b>safe working practices</b> are followed during excavation activities that are in accordance with current relevant <b>specifications and procedures</b></li> <li>h) you identify any problems with the excavation work being carried out and demonstrate that you know the appropriate remedial action to be taken</li> </ul> |   |
| Knowledge requirements   | Related performance criteria  |
| <p>You need to know:</p> <ul style="list-style-type: none"> <li>1 the main types of footway, carriageway and pavement structure and their characteristics</li> <li>2 the appropriate equipment to use for excavation and support operations and the factors influencing its selection (including trench width and depth, ease of access, types of ground and noise nuisance)</li> <li>3 how to ensure that equipment is fit for purpose</li> <li>4 how to identify areas of high risk for excavation activities</li> <li>5 precautions to be taken when excavating in areas of high risk (including close proximity to trees)</li> <li>6 how to check that a trench has been excavated to the correct specifications</li> <li>7 the working methods to use to minimise the requirement for subsequent reinstatement</li> <li>8 safe working practices for excavation activities</li> <li>9 problems which occur during excavation work in the highway and the appropriate remedial action to take</li> </ul>   | <ul style="list-style-type: none"> <li>a</li> <li>b</li> <li>b</li> <li>c</li> <li>d</li> <li>e</li> <li>f</li> <li>all</li> <li>h</li> </ul> |
| Range to be covered  |   |
| <ul style="list-style-type: none"> <li>I. You must show that <b>equipment</b> includes: <ul style="list-style-type: none"> <li>i. appropriate hand tools - including square and round mouth shovels</li> <li>ii. appropriate powered equipment - including pavement saw and breaking-out tools</li> </ul> </li> </ul>  |   |

# Unit 11 Monitoring excavation in the highway

## Element 11.1 Monitor excavation work in the highway

### Range to be covered (contd.)

- II. You must show that **safe working practices** are:
- safe use of tools and equipment
  - use of appropriate personal protective equipment for excavation activities, including as necessary:
    - high visibility jacket or waistcoat
    - hard hat
    - ear defenders
    - eye protection visor/goggles
    - dust mask
    - gloves
    - protective footwear
    - waterproof clothing
  - use of risk assessment methods to identify and control hazards on site
  - precautions to minimise danger or inconvenience to road users
  - precautions to minimise danger of inconvenience to site personnel
  - precautions to minimise damage to equipment or apparatus
- III. You must show that **specifications and procedures** are:
- Health and Safety Executive Guidelines (*HSG 185: Health and Safety in Excavations*)
  - Specification for the Reinstatement of Openings in Highways
  - manufacturer's operating procedures for powered equipment

### Evidence requirements

- Your evidence must cover all the performance criteria, all the knowledge requirements and all the range items listed in this element.
- You must complete the following tasks, for an actual or simulated excavation in a footway or carriageway:
  - Monitor the selection and use of equipment for excavation activities.
  - Ensure that areas of high risk are identified and monitor the precautions taken during excavation.
  - Ensure that the trench is correctly excavated, using working methods that minimise subsequent reinstatement.

### Specification of works

- The assessment must take place at a site with physical characteristics that conform to the definition of 'street' at section 48 or 'road' at section 107 of the New Roads and Street Works Act 1991.

### Assessment conditions

- The assessment will be undertaken by a qualified assessor, who will observe you monitoring excavation work in the highway.
- The site at which you are assessed must conform to the specifications listed above. Real equipment must be used, that complies with the requirements of the Code of Practice.
- It is recognised that candidates for this unit are sometimes observed monitoring excavation in the highway as shown on video. Where this takes place, the video used must meet the following requirements:
  - the excavation activities down must conform to the specification detailed above
  - the activities shown must allow candidates to carry out all the tasks specified above, and must cover the performance standards for this element in full.
- If you are observed monitoring excavation in the highway as shown on a videotape, you must provide supplementary evidence of competence from the workplace. Where this includes a documented observation report, a qualified Street Works supervisor or assessor must provide this.

### Additional information for candidates and assessors

- The adopted specification for the works should correspond to the *Specification for the Reinstatement of Openings in Highways*. The following sections of the Specification provide particular guidance on various items within the performance criteria:
  - S3.2 (*Excavation*) provides general guidelines to be followed during excavation.
  - Notes for Guidance NG3.2 refers to HSG 185 (*Health and Safety in Excavations*), which provides health and safety guidance to those carrying out excavations.
  - When working in proximity to trees that could be considered as areas of risk, S1.10 (*Trees*) should be followed, which cites the guidelines of the National Joint Utilities Group publication *NJUG 10 – Guidelines for the Planning, Installation and Maintenance of Undertaker Services in Proximity to Trees*, and provides precautions to be taken during excavation activities.

# Unit 11 Monitoring excavation in the highway

## Element 11.2 Monitor action taken to avoid damage to underground apparatus during excavation

| Performance criteria   |  |
|--|--|
| <p>You must show that:</p> <ul style="list-style-type: none"> <li>a) you ensure that <b>utilities' apparatus</b> is correctly located and marked</li> <li>b) you ensure that exposed <b>utilities' apparatus</b> is correctly identified</li> <li>c) you ensure that risks of damage to <b>utilities' apparatus</b> during excavation activities are identified and precautions are taken to minimise them</li> <li>d) you identify damage to <b>utilities' apparatus</b> and demonstrate that you know the appropriate remedial action to be taken</li> <li>e) you ensure that exposed <b>utilities' apparatus</b> is supported safely, using the <b>appropriate equipment</b></li> <li>f) where the requirement exists for safe trench sidewall support, you ensure that this is identified and that the correct <b>specifications and procedures</b> are consulted for guidance on the action to be taken</li> <li>g) you ensure that <b>safe working practices</b> are followed in accordance with current relevant <b>specifications and procedures</b> as specified in the Code of Practice</li> </ul> |  |
| Knowledge requirements   | Related performance criteria   |
| <p>You need to know:</p> <ul style="list-style-type: none"> <li>1 the different types of utilities' apparatus likely to be encountered during excavations and how they should be located and marked</li> <li>2 how to identify different types of exposed utilities' apparatus correctly</li> <li>3 potential risks of damage to utilities' apparatus and the consequences of damage</li> <li>4 precautions to take to avoid damage to utilities' apparatus</li> <li>5 problems which occur in the event of damage to utilities' apparatus, and the appropriate remedial action to take</li> <li>6 the methods of supporting exposed utilities' apparatus safely and the appropriate equipment to use</li> <li>7 the circumstances in which trench sidewall support is required, and where to find the guidelines for its provision</li> <li>8 safe working practices for locating and avoiding underground apparatus and for excavating in the highway</li> </ul>   | <ul style="list-style-type: none"> <li>a</li> <li>b</li> <li>c</li> <li>c</li> <li>d</li> <li>e</li> <li>f</li> <li>all</li> </ul> |
| Range to be covered  |  |
| <ul style="list-style-type: none"> <li>I. You must show that <b>utilities' apparatus</b> includes:               <ul style="list-style-type: none"> <li>i. gas mains (plastic and metallic)</li> <li>ii. water mains (plastic and metallic)</li> <li>iii. sewers and drains</li> <li>iv. electricity cables (high- and low- voltage)</li> <li>v. telecommunications and television cables</li> </ul> </li> <li>II. You must show that <b>appropriate equipment</b> used to support exposed utilities' apparatus includes:               <ul style="list-style-type: none"> <li>i. slings</li> <li>ii. ropes</li> <li>iii. props</li> </ul> </li> <li>III. You must show that <b>specifications and procedures</b> are:               <ul style="list-style-type: none"> <li>i. Health and Safety Executive Guidelines (HSG 185: Health and Safety in Excavations)</li> <li>ii. Specification for the Reinstatement of Openings in Highways</li> </ul> </li> </ul>  |  |

# Unit 11 Monitoring excavation in the highway

## Element 11.2 Monitor action taken to avoid damage to underground apparatus during excavation

### Range to be covered (contd.)

IV. You must show that **safe working practices** are:

- i. safe use of tools and equipment
- ii. use of appropriate personal protective equipment, including as necessary:
  - high visibility jacket or waistcoat
  - hard hat
  - ear defenders
  - eye protection visor/goggles
  - dust mask
  - gloves
  - protective footwear
  - waterproof clothing
- iii. use of risk assessment methods to identify and control any hazards on site
- iv. precautions to minimise danger or inconvenience to road users
- v. precautions to minimise danger or inconvenience to site personnel
- vi. precautions to minimise damage to equipment or apparatus

### Evidence requirements

- Your evidence must cover all the performance criteria, all the knowledge requirements and all the range items listed in this element.
- You must complete the following tasks, for an actual or simulated excavation in the highway:
  - A. Ensure that utilities' apparatus is correctly located and marked.
  - B. Monitor the precautions taken to minimise the risk of damage to utilities' apparatus during excavation and take appropriate remedial action where damage occurs.
  - C. Ensure that exposed utilities' apparatus is correctly identified and safely supported.

### Specification of works

- The assessment must take place at a site with physical characteristics that conform to the definition of 'street' at section 48 or 'road' at section 107 of the New Roads and Street Works Act 1991.

### Assessment conditions

- The assessment will be undertaken by a qualified assessor, who will observe you monitoring the action taken to avoid damage to underground apparatus during excavation.
- The site at which you are assessed must conform to the specifications listed above. Real equipment must be used, that complies with the requirements of the Code of Practice.
- It is recognised that candidates for this unit are sometimes observed monitoring excavation in the highway as shown on video. Where this takes place, the video used must meet the following requirements:
  - a) the excavation activities shown must conform to the specification detailed above
  - b) the activities shown must allow candidates to carry out all the tasks specified above, and must cover the performance standards for this element in full.
- If you are observed monitoring excavation in the highway as shown on a videotape, you must provide supplementary evidence of competence from the workplace. Where this includes a documented observation report, a qualified Street Works supervisor or assessor must provide this.

### Additional information for candidates and assessors

- The adopted specification for the works should correspond to the *Specification for the Reinstatement of Openings in Highways*. The following sections of the Specification provide particular guidance on various items within the performance criteria:
  - i. S3.4.1 (*Side support*): states that "*the sides of all excavations in soft or loose ground shall, ordinarily, be provided with a side support system. The support system shall be properly designed and installed to restrain lateral movement of the sidewalls, and should be installed without delay.*"
  - ii. S3.4.2 states that "*Supports shall be progressively withdrawn as backfilling and compaction progresses, and all voids carefully filled.*"
  - iii. NG3.2 refers to HSG185 (*Health and Safety in Excavations*) which gives guidance to those carrying out excavations.
  - iv. NG3.4 (*Side support*) states that "*where required, there must be sufficient quantities of appropriate materials available to provide safe trench support.*"

# Unit 11 Monitoring excavation in the highway

## Element 11.3 Monitor selection, disposal and storage for re-use of excavated materials

| Performance criteria   |  |
|--|--|
| <p>You must show that:</p> <p>a) you ensure that <b>materials</b> selected for re-use are checked against the range of backfill, sub-base and modular materials permitted in the current specification</p> <p>b) you ensure that <b>materials</b> selected for disposal have been checked and confirmed as unsuitable for re-use</p> <p>c) you ensure that the storage arrangements made for <b>materials</b> to be re-used are safe and meet the requirements of current relevant <b>specifications and procedures</b></p> <p>d) you ensure that safe temporary storage is provided for <b>materials</b> that are unsuitable for re-use and that they are disposed of safely, in accordance with current relevant <b>specifications and procedures</b></p> <p>e) you ensure that <b>safe working practices</b> are followed, that are in accordance with the current relevant <b>specifications and procedures</b></p> <p>f) you identify any problems with the selection and storage of <b>materials</b> for re-use and the disposal of materials unsuitable for re-use, and demonstrate that you know the appropriate remedial action to be taken</p> |  |
| Knowledge requirements   | Related performance criteria                               |
| <p>You need to know:</p> <p>1 the range of backfill, sub-base and modular materials permitted for re-use</p> <p>2 the factors influencing the selection of materials for re-use or disposal and the consequences of using unsuitable materials</p> <p>3 appropriate and safe storage procedures for materials selected for re-use, and how the characteristics of materials affect the storage of materials (including chalk)</p> <p>4 appropriate and safe storage and disposal procedures for materials unsuitable for re-use</p> <p>5 safe working practices for the selection, storage and disposal of materials</p> <p>6 problems which occur during the selection, storage and disposal of materials and the appropriate remedial action to take</p>   |  |
|  | <p>a</p> <p>a, b</p> <p>c</p> <p>d</p> <p>all</p> <p>f</p> |
| Range to be covered  |  |
| <p>I. You must show that <b>materials</b> include:</p> <p>i. Class A</p> <p>ii. Class B</p> <p>iii. Class C</p> <p>iv. Class D</p> <p>v. Class E</p> <p>II. You must show that <b>safe working practices</b> include:</p> <p>i. safe use of tools and equipment</p> <p>ii. use of appropriate personal protective equipment, including as necessary:</p> <ul style="list-style-type: none"> <li>• high visibility jacket or waistcoat</li> <li>• hard hat</li> <li>• ear defenders</li> <li>• eye protection visor/goggles</li> <li>• dust mask</li> <li>• gloves</li> <li>• protective footwear</li> <li>• waterproof clothing</li> </ul> <p>iii. use of risk assessment methods to identify and control any hazards on site</p> <p>iv. precautions to minimise danger or inconvenience to road users</p> <p>v. precautions to minimise danger or inconvenience to site personnel</p> <p>vi. precautions to minimise damage to equipment or apparatus</p>   |  |

## Unit 11 Monitoring excavation in the highway

### Element 11.3 Monitor selection, disposal and storage for re-use of excavated materials

#### Range to be covered (contd.)

- III. You must show that **specifications and procedures** are:
- Health and Safety Executive Guidelines (*HSG 185: Health and Safety in Excavations*)
  - Specification for the Reinstatement of Openings in Highways

#### Evidence requirements

- Your evidence must cover all the performance criteria, all the knowledge requirements and all the range items listed in this element.
- You must complete the following tasks for an actual or simulated excavation in the highway:
  - Monitor the selection of materials for re-use as backfill.
  - Monitor the storage arrangements provided for materials suitable for re-use as backfill.
  - Monitor the provisions made for the storage and disposal of materials that are unsuitable for re-use.

#### Specification of works

- The assessment must take place at a site with physical characteristics that conform to the definition of 'street' at section 48 or 'road' at section 107 of the New Roads and Street Works Act 1991.

#### Assessment conditions

- The assessment will be undertaken by a qualified assessor, who will observe you monitoring the selection, disposal and storage for re-use of excavated materials.
- The site at which you are assessed must conform to the specifications listed above. Real equipment must be used, that complies with the requirements of the Code of Practice.
- It is recognised that candidates for this unit are sometimes observed monitoring excavation in the highway as shown on video. Where this takes place the video used must meet the following requirements:
  - the activities shown must conform to the specification detailed above
  - the activities shown must allow candidates to carry out all the tasks specified above, and must cover the performance standards for this element in full.
- If you are observed monitoring excavation in the highway as shown on a videotape, you must provide supplementary evidence of competence from the workplace. Where this includes a documented observation report, a qualified Street Works supervisor or assessor must provide this.

#### Additional information for candidates and assessors

- The adopted specification for the works should correspond to the *Specification for the Reinstatement of Openings in Highways*. The following sections of the Specification give particular references to re-usable materials:
  - S3.3.1 indicates that *"all excavated materials that are to be re-used should be protected from excessive drying or wetting during storage. Additionally, these materials should be excavated, stored, handled and laid so as to avoid contamination and loss of fines."*
  - S3.3.2 indicates that *"any excavated materials which is unsuitable for re-use should be removed from site as soon as practicable. Excavated material which is retained on site shall be stockpiled within the confines of site barriers, at a safe distance from the trench edge and prevented, so far as is practicable, from entering any drainage system or water course."*
  - S5.3.5 states that *"excavated chalk to be re-used as backfill shall comply with the following requirements:*
    - Excavated chalk shall be stockpiled for re-use and shall not be subjected to multiple handling.*
    - During wet weather, excavated chalk shall be protected against water ingress at all times."*
  - S6.3.4 (*Modular materials within the excavation*) states that *"where cobbles or setts are encountered during excavation, they may be recovered and re-used for reinstatement of the relevant layer."*

## **Unit 11 Monitoring excavation in the highway**

### **Element 11.3 Monitor selection, disposal and storage for re-use of excavated materials**

#### **Evidence requirements (contd.)**

##### **Additional information for candidates and assessors (contd.)**

- v. S9.1 indicates that *“the re-use of excavated materials as backfill material in verges and unmade ground is to be encouraged as part of a policy of environmentally sustainable construction.”*
- vi. A1.4 (Class D – cohesive materials) indicates that *“cohesive materials at the time of compaction shall be at an appropriate moisture content between 0.8 and 1.2 times the plastic limit, or be acceptable when subjected to Field Identification Test No. 2. Clays that contain insufficient moisture when excavated, or have dried excessively during site storage, as defined by Field Identification Test No. 2, may only be re-used provided that they are wetted to comply with Section A1.4 1) and compacted in accordance with Appendix A8 for Class D Cohesive Materials.”*
- vii. A12.1 (Interim reinstatement) indicates that *“where an interim reinstatement is required, the existing modules should be reused, including the use of broken modules. Where damage has resulted in fragmentation or widespread breakage of modules, then bituminous material may be used for interim reinstatement, provided they meet the performance requirements of Section S2 and that compaction of such material does not result in further damage to adjacent modules.”*
- viii. A12.2 (Permanent reinstatement) indicates that *“clean undamaged modules shall be re-used for permanent reinstatement; broken modules shall not be used for permanent reinstatement and shall be replaced.”*
- ix. NG6.3 (Base (roadbase) reinstatement – overlaid modular layers) states that the Specification *“permits the re-use of cobbles and setts for the reinstatement of the relevant layer. However, it is often extremely difficult to achieve a performance from such reinstatements that is similar to that of the original, well interlocked and ‘stress hardened’ layer. Failure to achieve this structural stiffness could result in failure of the reinstatement and particularly any surfacing materials laid thereon. The Specification does not permit the re-use of penning, in which the layer of modules is laid upright, in an interlocking manner, exhibiting a greater stiffness than an equivalent layer of cobbles/setts.”*
- x. NG7.7 (Modular roads) states that *“when excavating in modular roads, the existing modules shall be lifted carefully and stored for re-use.”*

# Unit 11 Monitoring excavation in the highway

## Element 11.4 Monitor site safety

| Performance criteria  |   |
|---|---|
| <p>You must show that:</p> <ul style="list-style-type: none"> <li>a) you monitor site operations in accordance with health and safety requirements</li> <li>b) you assess site conditions in accordance with health and safety requirements</li> <li>c) you ensure that checks have been carried out to ensure that appropriate <b>safety equipment</b> is available and is fit for purpose</li> <li>d) you ensure that <b>safe working practices</b> are followed on-site throughout the excavation operation, that are in accordance with health and safety requirements and current relevant <b>specifications and procedures</b></li> <li>e) you identify risks to site safety and demonstrate that you know the appropriate remedial action to be taken</li> </ul>   |   |
| Knowledge requirements  | Related performance criteria  |
| <p>You need to know:</p> <ul style="list-style-type: none"> <li>1 health and safety requirements for site operations</li> <li>2 health and safety requirements for particular site conditions</li> <li>3 the appropriate safety equipment to use during site operations, and how to ensure that it is fit for purpose</li> <li>4 safe working practices on site and for excavation activities in the highway</li> <li>5 potential risks to site safety and the appropriate remedial action to take</li> </ul>   | <ul style="list-style-type: none"> <li>a</li> <li>b</li> <li>c</li> <li>d</li> <li>e</li> </ul> |
| Range to be covered   |   |
| <ul style="list-style-type: none"> <li>I. You must show that the following <b>safety equipment</b> is used on site as necessary:               <ul style="list-style-type: none"> <li>i. adequate range of signing, lighting and guarding equipment, including:                   <ul style="list-style-type: none"> <li>• signs</li> <li>• cones</li> <li>• signals</li> <li>• lamps</li> <li>• footway boards</li> <li>• barriers</li> <li>• portable traffic signals</li> </ul> </li> <li>ii. high visibility safety equipment</li> <li>iii. suitable materials to construct ramps</li> </ul> </li> <li>II. You must show that <b>safe working practices</b> include the following:               <ul style="list-style-type: none"> <li>i. safe use of tools and equipment</li> <li>ii. use of appropriate personal protective equipment, including as necessary                   <ul style="list-style-type: none"> <li>• high visibility jacket or waistcoat</li> <li>• hard hat</li> <li>• ear defenders</li> <li>• eye protection visor/goggles</li> <li>• dusk mask</li> <li>• gloves</li> <li>• protective footwear</li> <li>• waterproof clothing</li> </ul> </li> <li>iii. use of risk assessment methods to identify and control any hazards on site</li> <li>iv. precautions to minimise danger or inconvenience to road users</li> <li>v. precautions to minimise danger or inconvenience to site personnel</li> <li>vi. precautions to minimise damage to equipment or apparatus</li> </ul> </li> <li>III. You must show that <b>specifications and procedures</b> are:               <ul style="list-style-type: none"> <li>i. Health and Safety Executive Guidelines (<i>HSG 185: Health and Safety in Excavations</i>)</li> <li>ii. Specification for the Reinstatement of Openings in Highways</li> <li>iii. Safety at Street Works and Road Works – A Code of Practice</li> </ul> </li> </ul> |   |

## **Unit 11 Monitoring excavation in the highway**

### **Element 11.4 Monitor site safety**

#### **Evidence requirements**

- Your evidence must cover all the performance criteria, all the knowledge requirements and all the range items listed in this element.
- You must provide evidence of monitoring safety on site *throughout* an actual or simulated site situation.

#### **Assessment conditions**

- The assessment will be undertaken by a qualified assessor, who will observe you monitoring site safety during excavation in the highway.
- The site at which you are assessed must conform to the specifications listed for this unit. Real equipment must be used, that complies with the requirements of the Code of Practice.
- It is recognised that candidates for this unit are sometimes observed monitoring site safety during excavation in the highway as shown on video. Where this takes place, the activities shown on the video used must allow candidates to carry out the task specified above, and must cover the performance standards for this element in full.
- If you are observed monitoring excavation in the highway as shown on a videotape, you must provide supplementary evidence of competence from the workplace. Where this includes a documented observation report, a qualified Street Works supervisor or assessor must provide this.

#### **Additional information for candidates and assessors**

- The adopted specification for the works should correspond to the *Specification for the Reinstatement of Openings in Highways and Safety at Street Works and Road Works – A Code of Practice* under the New Roads and Street Works Act 1991. Notes for Guidance NG3.2 (*Excavation*) refers to HSG 185 (*Health and Safety in Excavations*) which gives guidance to those carrying out excavations. Where possible, this requires all excavations to be planned before the commencement of works on site. Additionally, it requires work to be undertaken and supervised by properly qualified personnel.